

DATE ISSUED: September 6, 2001\ REPORT NO. 01-184
ATTENTION: Honorable Mayor and City Council
Agenda of September 10, 2001
SUBJECT: Energy Conservation and Management
REFERENCE: Manager's Report No.01-175 dated August 2, 2001

SUMMARY

Issues –

- 1) Should the City Council authorize the City Manager to execute a Memorandum of Understanding with the San Diego Regional Energy Office (SDREO), County of San Diego, County Water Authority, SANDAG and other agencies to partner in a San Diego Regional Energy Infrastructure Study to be used in the development of a Regional Energy Strategy and provide funding for the study not to exceed \$75,000?
- 2) Should the City Council authorize the City Manager to enter into an Electronic Data Interchange (EDI) and Funds Transfer Agreement with San Diego Gas & Electric Company so the City can receive and pay its monthly energy bills electronically?

Manager's Recommendations –

- 1) Authorize the City Manager to execute a Memorandum of Understanding with the San Diego Regional Energy Office to participate in a San Diego Regional Energy Infrastructure Study and provide funding for the study not to exceed \$75,000.
- 2) Authorize the City Manager to enter into an Electronic Data Interchange (EDI) and Funds Transfer Agreement with San Diego Gas & Electric Company to enable the City to transition from receiving and processing 3000 "paper" energy bills monthly to

receiving and processing energy bills electronically and ultimately to paying energy bills through the electronic transfer of funds.

Other Recommendations – None

Fiscal Impact – The \$75,000 cost of the Regional Energy Infrastructure Study is included in the Energy Conservation and Management Division's FY2001 budget. There is no direct fiscal impact from entering into the EDI Agreement with SDG&E. The internal programming costs for using the EDI data for the management of energy consumption is estimated to be less than \$30,000 and is available in existing data processing budgets of the participating departments.

BACKGROUND

On February 12, 2001, City Council directed the City Manager to implement Mayor Murphy's recommendation to establish an energy oversight position to administer San Diego's efforts toward achieving energy self-reliance and conservation. Also included in Mayor Murphy's Goal 9 – Pursue Energy Independence – was direction for the City's Energy Administrator to work with the San Diego Regional Energy Office in pursuing initiatives to make San Diego a model city in energy conservation and the utilization of renewable energy resources.

The San Diego Regional Energy Office (SDREO) is an independent, public benefit, non-profit corporation that serves as the regional clearing-house for energy information. It also provides local governments with a link to state and federal energy conservation and management programs that benefit the local agencies and their residents.

Electronic Data Interchange (EDI) is a technology that allows the direct computer to computer exchange of business information. The City is currently using EDI as part of the Federal Electronic Data Interchange Program (FEDI). This program allows the City to receive direct electronic deposits of federal funding into City bank accounts.

DISCUSSION

Regional Energy Infrastructure Study

The San Diego Association of Governments (SANDAG) has tasked SDREO to update the current San Diego Regional Energy Plan adopted by SANDAG in December 1994. The goal of the Regional Energy Plan is to support the future prosperity of the San Diego region through measures that ensure an adequate energy supply, at a reasonable cost, consistent with a high degree of environmental quality. The first step in updating the Regional Energy Plan will be to conduct a study of the electricity and natural gas infrastructure needs for the San Diego region between now and 2030.

The San Diego Regional Energy Office (SDREO) has proposed to enter into a partnership with the City of San Diego, County of San Diego, County Water Authority, SANDAG, the Port of San Diego and the Utility Consumers Action Network (UCAN) to conduct a comprehensive study of the need for energy infrastructure in the region and to guide development of a long-term Regional Energy Strategy. The cost of the study will not exceed \$485,000 and will be paid by the participating organizations, as shown in the following table, with a maximum cost to any participant of \$100,000.

Funding Organization	Funding Amount
City of San Diego	\$75,000
County of San Diego	\$100,000
SANDAG	\$50,000
San Diego County Water Authority	\$100,000
San Diego Unified Port District	\$100,000
San Diego Regional Energy Office	\$30,000
Utility Consumers Action Network	\$30,000
Total	\$485,000

The study will be managed by the San Diego Regional Energy Office, with the advice and consent of the participating organizations, as defined in a Memorandum of Understanding to be entered into by the participating organizations.

The Regional Energy Infrastructure Study will develop a Regional Energy Strategy to address projected electricity and natural gas supply and demand in the region through 2030 based upon:

- Historical electricity and natural gas consumption and peak demand for San Diego County and the Baja Norte region from 1980 – 2000.
- Current electricity and natural gas supplies and infrastructure and planned infrastructure including new technologies such as liquefied natural gas (LNG).
- Recent reductions in electricity and natural gas demand as a result of demand-side management programs and activities resulting from the current energy emergency.

- Growth in electricity and natural gas supply and demand outside of the San Diego region which impact the region.

The consultant will be tasked to consider four future development scenarios:

- Continued build-out of traditional energy infrastructure (baseload power plants and imported energy).
- Moderate deployment of on-site distributed generation and use of renewable resources.
- Aggressive deployment of on-site distributed generation and use of renewable resources.
- Deployment of emerging technologies such as fuel cells, etc.

Finally, the consultant will establish a framework for local agencies to analyze the options and develop potential policies that would determine energy decisions related to future costs, risks, system utilization, environmental impacts and energy markets. The study will not make policy recommendations, but would provide information to assist local agencies in developing energy policies and, working through SANDAG, update the San Diego Regional Energy Plan.

Electronic Data Interchange

EDI is a technology that allows the direct computer to computer interchange of business data between organizations (See Attachment 1). The electronic data on energy consumption from SDG&E to be provided through EDI is a key element in the Portal technology intranet and its business intelligence capability, currently under development, to provide department managers with real time information on energy consumption and costs compared to the three to four month delay experienced with the current paper billing system.

ESD is working with SDDPC's Technology Office to automate the current gas and electric invoicing and billing process for the City. Once the EDI protocol is implemented, SDG&E will electronically transfer invoice data to ESD for automated processing of energy billing data. If approved by the City Auditor and Comptroller, EDI could also be used to automate the return payment of energy bills to SDG&E. The agreement with SDG&E will provide parallel billing using both invoicing methods (EDI and hard copy) for a period of six months to allow City staff to validate the accuracy of the digital data. The Agreement allows the City to withdraw from the Agreement, without penalty, upon 30 days written notice if it is determined the use of EDI is not advantageous or compatible with City processes.

ALTERNATIVES

1. Do not participate in or fund a Regional Energy Infrastructure Study.
2. Do not enter into an EDI Agreement with SDG&E.

Respectfully submitted,

Robert A. Epler
Interim Energy Management Administrator

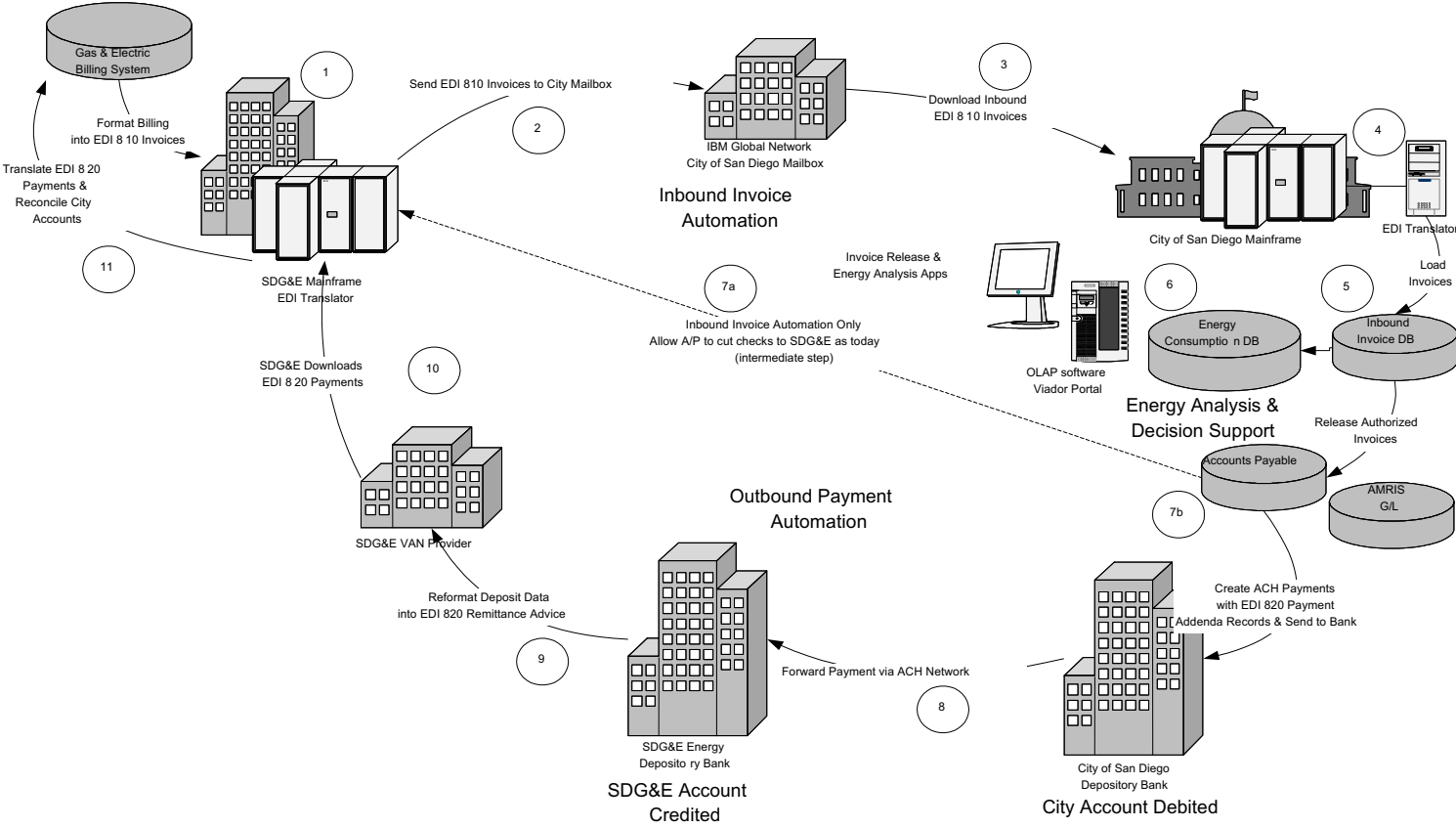
Approved by:

Richard L. Hays
Environmental Services Director

George I. Loveland
Senior Deputy City Manager

LOVELAND/HAYS/RAE

ELECTRONIC DATA INFORMATION TRANSFER PROCESS



ATTACHMENT 1